

REMARKS

Claims 1-14 and 16 are have been canceled. New claims 17-34 have been added. The new claims have support in the claims as originally filed.

The Examiner has stated in Paper No. 26 (page 4) that undue experimentation would be required to practice the claimed invention. To this end, the Examiner argues that Potgens demonstrates "not each and every amino acid substitution or modification will result in an antagonist," that it is not clear which substitutions would provide the desired activity, and that substitutions other than aspartic acid would be unpredictable. Additionally, the Examiner argues that Applicants' prior argument regarding making and testing substitutions "is merely an invitation to experiment."

"The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosure . . . coupled with information known in the art without undue experimentation." (*U.S. v. Electronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988). As MPEP § 2164.01 points out, "The test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue." (citing *In re Angstad*, 537 F.2d 498, 504, 190 USPQ 214, 219 (CCPA 1976)).

Applicants submit that the specification, along with the general knowledge in the field, fully enables the skilled artisan to make and use the claimed invention without undue experimentation. As the specification states, "one skilled in the art will appreciate that the effect [of a substitution] will be evaluated by routine screening assays." P. 26, line 13-14. The specification goes on to provide examples of methods used in creating and screening VEGF mutants. Thus, the specification provides "considerable direction and guidance." *In re Wands*, 8 USPQ2d 1400, 1406 (Fed. Cir. 1988). Furthermore, the Federal Circuit has

Serial No.: 08/734,443
Filed: October 17, 1996

stated that "a considerable amount of experimentation is permissible, if it is merely routine."

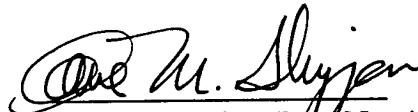
In re Wands, at 1404.

Applicants submit, in addition, that the specification provides substantially more than a mere "invitation to experiment" as to the claimed invention. Applicants have demonstrated modification of specific cysteine residues which prevents the resulting VEGF molecules from forming disulfide bonds. All that is left in order to identify further species of the invention is routine experimentation.

Applicants submit that the application is in form for allowance and early notification of such is requested. If there are remaining issues which the Examiner believes may be resolved by telephone, she is invited to call the undersigned attorney at (415) 781-1989.

Respectfully submitted,

DORSEY & WHITNEY LLP



Anne M. Shyjan, Reg. No. 47,086 for:
Richard F. Trecartin, Reg. No. 31,801
Filed under 37 CFR § 1.34(a)

Four Embarcadero Center
Suite 3400
San Francisco, CA 94111-4187
Telephone: (415) 781-1989